

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
8 April 2004 (08.04.2004)

PCT

(10) International Publication Number
WO 2004/029645 A1

(51) International Patent Classification⁷: G01R 33/38

(21) International Application Number:
PCT/GB2003/004237

(22) International Filing Date:
30 September 2003 (30.09.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0222625.6 30 September 2002 (30.09.2002) GB
0306945.7 26 March 2003 (26.03.2003) GB

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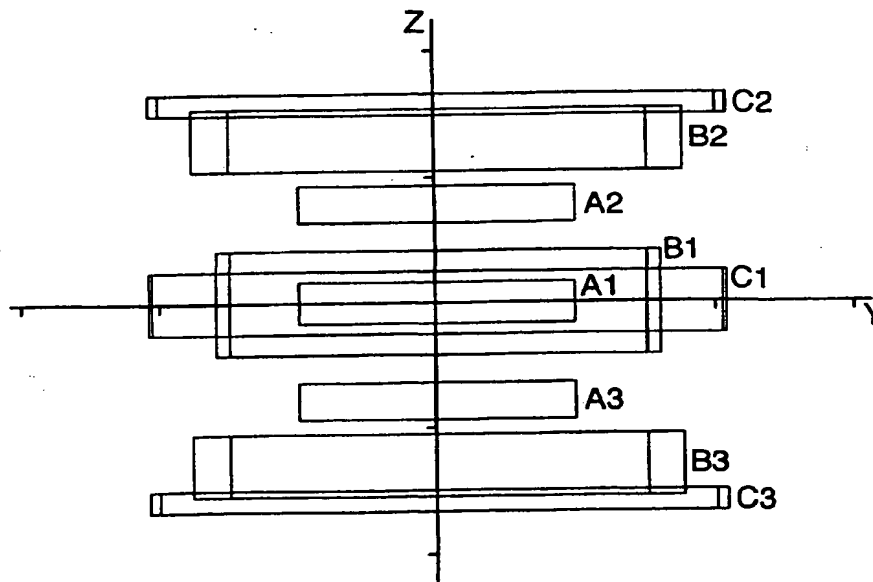
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(81) Designated States (national): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,
GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR,
KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK,
MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT,
RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR,
TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),

[Continued on next page]

(54) Title: MAGNETIC FIELD GENERATING ASSEMBLY AND METHOD



(57) Abstract: A magnetic field generating assembly comprising a set (A1-A3;B1-B3;C1-C3) of, typically substantially coaxial, coils substantially symmetrically arranged about a plane orthogonal to the axis. At least some of the coils carry working currents in the opposite sense to the other coils. The arrangement of turns and working currents carried by the coils is such that a first working volume (10) with a substantially homogeneous magnetic field is generated within the envelope defined by the assembly, and two second working volumes (11) each with a substantially homogeneous magnetic field are generated outside the envelope, the homogeneity of each of the first and second working volumes being sufficient to perform a NMR experiment on a sample in the working volume.

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European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

Published:

— *with international search report*

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